IN THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for identifying a logical channel in a radio frame part which may ~~comprise~~ include information of one or more logical channels, channel decoding of the information being possible by means of channel decoding methods relating to the different logical channels, the frame part including ~~comprising~~ a logical channel indicator, ~~preferably a bit map, characterized in that~~ the method ~~comprises the steps of~~ comprising:

reading the logical channel indicator from the information included in the received frame part ~~comprises~~;

arranging selected channel decoding methods into the order in which ~~they~~ the selected methods will be applied, the first channel decoding method selected being a channel decoding method relating to the logical channel indicated by said indicator;

channel decoding the information included in said frame part ~~comprises~~ in said selected order by applying the selected channel decoding methods until the channel decoding succeeds or all the selected channel decoding methods have been checked;

interpreting, in response to a channel decoding that succeeds when a selected channel decoding method is applied, said frame part to ~~comprise~~ include information of the logical channel relating to the successful channel decoding method; and

interpreting, in response to a channel decoding that fails when any one of the selected channel decoding methods is applied, said frame part to ~~comprise~~ include information of a logical channel selected as the default value.

2. (Currently Amended) A method for ensuring that stealing is detected in a time slot or a time slot part, the time slot including ~~comprising~~ a training sequence that indicates stealing, the method comprising:

reading of said training sequence from the received time slot~~, characterized in that the method comprises the steps of~~;

channel decoding, in response to stealing being indicated by said training sequence, a first time slot block by applying a channel decoding method relating to stealing;

channel decoding, in response to the channel decoding of said first block failing when the channel decoding method relating to stealing is applied, a second time slot block by applying a channel decoding method relating to stealing; and

interpreting, in response to the channel decoding of both the first and the second block failing when the channel decoding method relating to stealing is applied, the time slot to comprise traffic channel data.

3. (Currently Amended) The ~~A~~ method ~~according to~~ of claim 2, further comprising ~~characterized by~~ arranging, in response to the channel decoding of both the first and the second block failing when the channel decoding method relating to stealing is applied, a training sequence indicating a traffic channel as the training sequence.

4. (Currently Amended) The ~~A~~ method ~~according to~~ of claim 2, further comprising ~~characterized by~~ interpreting, in response to the channel decoding of the latter time slot block succeeding when the channel decoding method relating to stealing is applied, said time slot as a whole to comprise control channel data.

5. (Currently Amended) A receiver ~~(420)~~ functioning in a radio system, the receiver comprising a unit ~~(46)~~ performing channel decoding, the unit identifying one or more logical channels, and the unit ~~comprising the~~ performing methods relating to logical channels for channel decoding of the information included in the ~~that~~ received radio frame parts ~~comprise~~, the radio frame parts ~~comprising~~ including a logical channel indicator, ~~preferably a bit map,~~ wherein the ~~characterized in that said~~ unit ~~(46)~~ is arranged to

read the logical channel indicator from the information included in a received frame part ~~comprises~~;

arrange selected channel decoding methods into the order in which ~~they~~ the selected methods will be applied, the first channel decoding method selected being a channel decoding method relating to a logical channel indicated by said indicator;

channel decode the information included in said frame part ~~comprises~~ in said selected order by applying the selected channel decoding methods until the channel decoding succeeds or all the selected channel decoding methods have been checked;

interpret, in response to a channel decoding that succeeds when a selected channel decoding method is applied, said frame part to comprise include information of a logical channel relating to the successful channel decoding method; and

interpret, in response to a channel decoding that fails when any one of the selected channel decoding methods is applied, said frame part to ~~comprise~~ include information of a logical channel selected as the default value.

6. (Currently Amended) A receiver ~~(420)~~ functioning in a radio system, the receiver comprising a unit ~~(46)~~ performing channel decoding, the unit being arranged to:

read from a received time slot a training sequence indicating stealing~~, characterized in the said unit (46) is arranged to~~ ;

channel decode, in response to stealing being indicated by said training sequence, a first time slot block by applying a channel decoding method relating to stealing;

channel decode, in response to the channel decoding of said first block failing when the channel decoding method relating to stealing is applied, a second time slot block by applying the channel decoding method relating to stealing;

interpret, in response to the channel decoding of both the first and the second block failing when the channel decoding method relating to stealing is applied, the time slot to ~~comprise~~ include traffic channel data.

7. (Currently Amended) The ~~A~~ receiver ~~according to~~ of claim 6, ~~characterized in that said~~ wherein the unit ~~(46)~~ is arranged to change, in response to the channel decoding of both the first and the second block failing when the channel decoding method relating to stealing is applied, a training sequence indicating a traffic channel as the training sequence.

8. (Currently Amended) The ~~A~~ receiver ~~according to~~ of claim 6, ~~characterized in that said~~ wherein the unit is arranged to interpret, in response to the channel decoding of the latter time slot block succeeding when the channel decoding method relating to stealing is applied, said time slot as a whole to ~~comprise~~ include control channel data.

9. (Currently Amended) The ~~A~~ receiver ~~according to~~ of claim 5, wherein ~~characterized in that~~ the receiver is part of a base station of a mobile communications system.

10. (Currently Amended) The ~~A~~ receiver ~~according to~~ of claim 5, ~~characterized in that~~ wherein the receiver is part of a subscriber terminal of a mobile communications system.

11. (Currently Amended) A channel decoding unit ~~(46) to be connected to~~ for connection to a receiver ~~(420)~~ in a radio system, the unit being ~~capable of~~ configured to:

~~identifying~~ identify one or more logical channels; ~~and the unit comprising the~~

perform methods relating to logical channels for the channel decoding of the information included in ~~that~~ received radio frame parts ~~comprise~~, the radio frame parts including ~~comprising~~ a logical channel indicator; ~~, preferably a bit map, characterized in that said unit (46) is arranged to~~

read the logical channel indicator from the information included in a received frame part ~~comprises~~;

arrange selected channel decoding methods into the order in which ~~they~~ the selected methods will be applied, the first channel decoding method selected being a channel decoding method relating to a logical channel indicated by said indicator;

channel decode the information included in said frame part ~~comprises~~ in said selected order by applying the selected channel decoding methods until the channel decoding succeeds or all the selected channel decoding methods have been checked;

interpret, in response to a channel decoding that succeeds when a selected channel decoding method is applied, said frame part to comprise information of a logical channel relating to the successful channel decoding method; and

interpret, in response to a channel decoding that fails when any one of the selected channel decoding methods is applied, said frame part to comprise information of a logical channel selected as the default value.

12. (Currently Amended) A channel decoding unit ~~(46) to be connected~~ for connection to a receiver ~~(420)~~ in a radio system, the unit being configured to:

~~arranged to~~ read from a received time slot a training sequence indicating stealing; ~~, characterized in that the unit is arranged to~~

channel decode, in response to stealing being indicated by said training sequence, a first time slot block by applying a channel decoding method relating to stealing;

channel decode, in response to the channel decoding of said first block failing when the channel decoding relating to stealing is applied, a second time slot block by applying the channel decoding method relating to stealing; and

interpret, in response to the channel decoding relating to both the first and the second block failing when the channel decoding method relating to stealing is applied, the time slot to comprise traffic channel data.

13. (Currently Amended) The~~A~~ unit ~~according to~~ of claim 12, ~~characterized in that said~~ wherein the unit is arranged to change, in response to the channel decoding of both the first and the second block failing when the channel decoding method relating to stealing is applied, a training sequence indicating a traffic channel as the training sequence.

14. (Currently Amended) The~~A~~ unit ~~according to~~ of claim 11, ~~characterized in that~~ wherein the unit is arranged to interpret, in response to a channel decoding of the latter time slot block succeeding when the channel decoding method relating to stealing is applied, said time slot as a whole to ~~comprise~~ include control channel data.

15. (Currently Amended) The~~A~~ unit ~~according to~~ of claim 11, ~~characterized in that~~ wherein the unit is part of a base station of a mobile communications system.

16. (Currently Amended) The~~A~~ unit ~~according to~~ of claim 11, ~~characterized in that~~ wherein the unit is part of a subscriber terminal of a mobile communications system.

17. (Currently Amended) The ~~A~~ receiver ~~according to~~ of claim 6, ~~characterized in that~~ wherein the receiver is part of a base station of a mobile communications system.

18. (Currently Amended) The ~~A~~ receiver ~~according to~~ of claim 6, ~~characterized in that~~ wherein the receiver is part of a subscriber terminal of a mobile communications system.

19. (Currently Amended) The ~~A~~ unit ~~according to~~ of claim 12, ~~characterized in that~~ wherein the unit is arranged to interpret, in response to a channel decoding of the latter time slot block succeeding when the channel decoding method relating to stealing is applied, said time slot as a whole to comprise control channel data.

20. (Currently Amended) The ~~A~~ unit ~~according to~~ of claim 12, ~~characterized in that~~ wherein the unit is part of a base station of a mobile communication system.

21. (Currently Amended) The ~~A~~ unit ~~according to~~ of claim 12, ~~characterized in that~~ wherein the unit is part of a subscriber terminal of a mobile communication system.